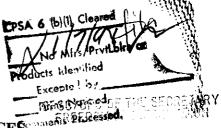
## LOG OF MEETING



## DIRECTORATE FOR ENGINEERING SCIENCES

**SUBJECT:** 

Meeting with Underwriters Laboratories (UL)

Representatives to Discuss Thermoplastics Project

DATE OF MEETING:

December 29, 1997

PLACE:

Rm. 612, CPSC Headquarters, Bethesda, MD and CPSC

LSE Bldg. C., Gaithersburg, MD

LOG ENTRY SOURCE:

Hammad Ahmad Malik

DATE OF ENTRY:

December 30, 1997

**COMMISSION ATTENDEES:** 

Hammad Malik (ESEE) Bill King (ESEE) AM only Andrew Stadnik (ES) AM only

NON COMMISSION ATTENDEES:

Larry Bruno (UL, Melville) Kenneth Vessey (UL, Melville)

Sam Cristy (Product Safety Letter) AM only Christine Ames (Product Safety Letter) PM only

SUMMARY OF MEETING: Mr. Bill King began the meeting by providing some background on the AHAM meeting with the commissioners and the resulting UL/Industry TAP meeting held on November 6, 1997. Mr. King spoke talk about the subsequent UL Bulletin reporting on the TAP meeting. This document indicated that there are several areas of mutual interest, one of which is thermoplastics flammability. Mr. King mentioned the difficulties of pinpointing the exact failure that caused a plug-in type portable electric appliance to burn. Concerns that the Underwriters Laboratories (UL) Hazard Based Safety Engineering (HBSE) approach, to be successful, may require HBSE analyses for each and every design of portable electric consumer product in order to address all potential ignition sources were also voiced.

Mr. Andrew Stadnik then asked the UL representatives if they know if any correlations have been made between UL 94 ratings of enclosure materials and the performance of the appliance when subjected to UL 746C end-product flame tests. Mr. Kenneth Vessey indicated that he is not aware that such a correlation has been made. He did mention that by testing experience they can roughly correlate the UL 746C end-product flame test results to the benchmark ratings achieved by UL 94 testing.

Mr. Larry Bruno brought up the possible issue of toxicity related to the increased usage of flame retardant chemicals. He mentioned toxicity tests conducted in accordance with the University of Pittsburgh test method demonstrated the burning plastics containing fire retardant chemicals were up to four times more toxic than plastics which did not contain any fire retardant chemicals. Mr. Stadnik indicated that he would like to receive a copy of this test method. Mr. Stadnik also mentioned that test results from the Fire Retardant Chemicals Association show that deaths from burning plastics are driven by carbon monoxide production. According to these tests, deaths were not driven by the level of fire retardant chemicals within the plastic.

Mr. Hammad Malik provided a brief summary of the on-going CPSC thermoplastics testing, and the results of the testing completed to date.

The UL representatives indicated that they were not willing to perform the UL 94 tests on samples that were sent to them by CPSC. They indicated that the number of samples and the quality of the samples were not adequate for them to test. Mr. Malik explained to the UL representatives that it was not the intention of the testing to achieve an original UL 94 rating, The reason for the testing by UL is to verify the results that CPSC achieved. Mr. Malik also showed how the number of samples provided were more than sufficient for UL to test.

The morning session of the meeting ended with Mr. Kenneth Vessey showing some pictures of the UL flammability testing facilities at UL's Melville, NY location.

The UL representatives and Mr. Hammad Malik met at the CPSC engineering lab after lunch. The UL representatives verified that the CPSC lab setup for UL 94 and UL 746C testing was equivalent to the setup UL uses. Some minor changes were suggested by UL. Mr. Hammad Malik performed testing on standard specimens that the UL representatives brought. It was mutually agreed that the CPSC setup renders results equivalent to those achieved by the UL setup. Finally, Mr. Malik performed some UL 746C testing after which the meeting came to a close.